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(54) Title: METHODS OF IDENTIFYING COMPOUNDS WHICH MODULATE GRANULOCYTE-COLONY STIMULATING FACTOR (G-CSF) DEPENDENT PROCESSES BY MODULATION OF THE LEVELS OF A SUPPRESSOR OF CYTOKINE SIGNALING (SOCS)

(57) Abstract: The present invention relates generally to compounds which modulate cytokine-dependent processes. More particularly, the compounds of the present invention modulate responses to a colony stimulating factor and even more particularly to granulocyte-colony stimulating factor (G-CSF) by modulating the levels of molecules which inhibit G-CSF such as but not limited to a suppressor of cytokine signaling (SOCS) and in particular SOCS-3. The present invention further contemplates methods for regulating G-CSF-dependent processes by contacting cells in vitro with or administering to a subject a compound which up- or down-regulates the level of activity of G-CSF by modulating the level or activity of a SOCS molecule such as SOCS-3. The instant compounds are further useful for modulating a range of G-CSF-induced cellular responses including neutrophil recovery after chemotherapy or radiotherapy, mobilizing stem and progenitor cells, treating infection and treating inflammatory conditions.